APPENDIX 1: Banding, Marking, Radio and Satellite Transmitters

Each released EMP whooping crane is individually marked with color-coded plastic leg bands above the hock of each leg. There are two sizes of bands, small bands and transmitter bands. Each bird carries a VHF transmitter on one leg; some birds also carry a satellite transmitter (PTT) on the other leg. An aluminum lock-on Bird Banding Lab (BBL) band is attached above the toes of the right leg. A team of bird banders from USFWS, ICF and other involved partners collaborates to band the birds.

Color Bands: The color-marking scheme consists of different combinations of red, green, and white bands with all colors on each bird. These bands are wrap-around type with no protrusions. They are custom-fabricated of Gravoply ABS acrylic. Due to fading, beginning September 2004 small red bands are made of Darvic PVC. One to three small bands, each 1" tall, is stacked on one leg. Each transmitter is attached to two transmitter bands, each 1.5" tall.

Transmitters: Each bird carries a VHF transmitter operating at a different frequency in the 164-166 MHz range. The standard transmitter is manufactured by ATS (Isanti, MN) and powered by a single lithium AA battery. PTT's are 30-g SiV's manufactured by Microwave Telemetry (Columbia, MD).

Aluminum Bands: The BBL does not offer a band of the correct size for attachment above the toes of a whooping crane. No. 9 lock-on bands are therefore cut down to size and reformed before attachment to project birds.